

In the Claims:

Please cancel claims 1-20 and 30, without prejudice or disclaimer, as indicated in the following listing of claims, which replaces all prior versions.

1-20. (Cancelled).

21. (Previously presented) A method for preserving linearity of a RF power amplifier, the power amplifier including a RF power output unit having a characteristic drive level and fed by a supply voltage, comprising:

measuring the output voltage of the RF power output unit;

comparing the measured output voltage to at least one threshold voltage to produce a control signal; and

reducing the drive level or increasing the supply voltage of the RF power output unit by means of the control signal to operate the output unit below its saturation level,

wherein the RF power output unit is a transistor having a base terminal connected to an output terminal of a driver unit providing the drive level and a collector terminal connected to the supply voltage through an inductance, the output voltage being measured at the transistor collector terminal.

22. (Previously Presented) The method of claim 21, wherein the at least one threshold voltage is equal to a minimum collector voltage of the transistor.

23. (Previously presented) A circuit for preserving linearity of a RF power amplifier wherein the power amplifier includes a RF power output unit having a characteristic drive level, comprising:

a measuring unit measuring the output voltage of the RF power output unit;

a comparing unit comparing the measured output voltage of the RF power output unit to a threshold voltage to produce a control signal;

a drive level adaptation unit reducing the drive level of the RF power output unit or a supply voltage adaptation unit increasing a supply voltage of the RF power output unit to operate the output unit below its saturation level for preserving linearity of the RF power amplifier,

wherein the RF power output unit is a transistor having a base terminal connected to an output terminal of a driver unit providing the drive level and a collector terminal connected to the supply voltage through an inductance, the output voltage being measured at the transistor collector terminal.

24. (Previously Presented) The circuit of claim 23, wherein the at least one threshold voltage is equal to a minimum collector voltage of the transistor.

25. (Previously Presented) The circuit of claim 23, further comprising an RF antenna and a matching circuit coupled between the RF antenna and the collector terminal, and wherein the comparing unit is coupled between the collector terminal and the matching circuit.

26. (Previously Presented) The method of claim 21, wherein the RF power amplifier includes a variable gain preamplifier supplying the drive voltage to the RF power output unit and wherein the control signal is used to adapt the gain of the preamplifier.

27. (Previously Presented) The method of claim 26, wherein the control signal is combined with the gain control signal of the preamplifier.

28. (Previously Presented) The circuit of claim 23, wherein the power amplifier includes a variable gain preamplifier supplying the drive voltage to the RF power output unit; and wherein the control signal is fed from the comparing unit to the preamplifier to adapt the gain of the preamplifier.

29. (Previously Presented) The circuit of claim 28, comprising a combining circuit between the comparing unit and the preamplifier combining the control signal with the gain control signal of the preamplifier.

30. (Not entered).